and small size, which he employs to remove not only the *incisores* and *cuspidati*, but the *bicuspides*, molar, and *dentes sapientiæ* of the upper jaw, and the *bicuspides*, first and second molar, and *dentes sapientiæ* of the lower. On this point Mr Bell's experience must be allowed to have great weight. But we cannot refrain from observing, that no forceps can be used with the steady and sure action which can at all times be obtained by the lever and claw of the key instrument. It is no argument against the use of an instrument that it is occasionally abused; and we suspect after all that the key is safer in general hands than any other species of extractor. If, however, Mr Bell really can simplify the instrumental cabinet of his brethren, he deserves the thanks of the profession; and ours, we assure him, shall not be withheld.

His adaptation of a rack to the Hawksbill forceps seems ingenious, and we daresay will answer expectation. But on this point we observe that the relinquishment of the key is the very circumstance which has rendered this complicated contrivance requisite. It is the advantage of the key that when once fixed, nothing can make it slip, unless the tooth be too small; and every turn that it makes causes it to grasp the tooth more firmly, till the latter is started from the alveolar cavity.

The volume is concluded with observations on neuralgia, constitutional and local, upon which our limits do not permit us to enter. But we have much pleasure in recommending them to the notice of our readers, who will find that Mr Bell makes some distinctions which are of great practical importance in the treatment of the disease, and the adaptation of remedies to its several varieties.

- ART. III.—1. *Some Account of a Case in which the Uterus, in a state of malignant ulceration, was successfully removed.* By JAMES BLUNDELL, M. D. Lecturer on Physiology and Midwifery in Guy's Hospital, London. (London Medical Gazette, August 1828.)
2. *Case of Extirpation of the Uterus.* By JOHN M. BANNER, Surgeon to the North Dispensary, Liverpool. (Ibid. October 1828.)
3. *Two Cases in which Extirpation of the Uterus was performed.* By JAMES BLUNDELL, M. D. &c. (Ibid. November 1828.)
4. *Observation de l'Extirpation complete de l'Utérus pratiquée à l'Hotel-Dieu de Paris.* Par M. le PROFESSEUR RECAMIER. (Arch. Gén. de Médecine, 1829, xxi. 78.)

5. *Deux cas de l'Extirpation de l'Utérus suivis de mort.*
Par M. Roux. (Bulletins des Sciences Medicales, Octobre 1829.

SINCE describing *Dr Sauter's* case of extirpation of the uterus in our number for July 1824, we have not hitherto felt it incumbent on us to take farther notice of the operation, or of the various attempts which have been made in this country and elsewhere to follow the example of that surgeon and his adventurous countrymen. An operation so dazzling in its circumstances, and so tempting in its object, could not fail to find many men bold enough to incur the responsibility of its manifold risks. And accordingly in the course of the last two years no fewer than nine cases have been published in which it was attempted. These we have not noticed as they occurred, because we scarcely consider it a legitimate part of the duty of the Quarterly Reviewer to review individual cases, which singly admit of no general conclusions. By waiting till cases have accumulated in sufficient number, it is at length in our power to present the reader with general results, which to the greater part of the surgical profession are of much more interest than the particular details of the operations. For, with respect to an operation of this kind, the question which the surgeon will have to consider is not so much, whether he should perform it, as whether he would advise it,—not one perhaps being to be found in a hundred who would encounter personally its difficulties and dangers.

Under these impressions we proceed to give an abstract of the instances in which the entire uterus has been removed; and at the close some general observations will be made on the probability of this operation becoming a regular and legitimate part of operative surgery.

The first idea of the possibility of removing the diseased uterus from its position in the pelvis was evidently taken, as appears in our review of *Dr Sauter's* work, from first the accidental, and subsequently the intentional removal of that organ when in a state of prolapsus or inversion. Sometimes it was removed accidentally with the knife by ignorant persons, who mistook it for a polypus or other tumour; at other times it was purposely removed by scientific surgeons with the ligature, as the only effectual remedy for a troublesome, loathsome, and dangerous disease. This is a very different operation from the one which is the proper subject of the present article. But as it has been of so much importance in giving rise to the operation of removal of the uterus from its natural situation in the

pelvis, it may be well to consider what additional facts have lately appeared on the preliminary question of the propriety of removal of the prolapsed or inverted uterus.

In addition to the cases alluded to in our review of *Dr Sauter's* treatise, several instances have recently occurred in this country, where the whole or a great part of the uterus has been removed when it was protruded in a state either of inversion or of prolapsus. In 1818 *Mr Neunham* published an account of the extirpation of the uterus in a case of inversion.* In 1819 *Mr Windsor* of Manchester published in the *Medico-Chirurgical Transactions*† an account of a similar instance, where he removed a large portion of the fundus of the uterus, together with the greater part of the Fallopian tubes. In 1822, *Dr Charles Johnson* described in the *Dublin Hospital Reports*‡ two similar cases, in each of which the fundus and Fallopian tubes were removed. In the *Medical Gazette* for June 1828, a fifth case of the kind has been briefly noticed. The most striking instance of the present description, however, is one related by *Professor Récamier* § in the *Archives Générales de Médecine* for January 1826.

In this case the patient, after being long liable to prolapsus of the uterus, was attacked about the age of 50 with a muco-sanguinolent discharge from the vagina, which was traced to a fungoid tumour of a cancerous nature formed on the cervix of the prolapsed uterus. When the woman was reduced to such a state that death at no very remote period appeared inevitable, *M. Récamier* resolved to remove the tumour and prolapsed uterus by a ligature. This he was encouraged to attempt on finding, that the finger placed in the rectum met the hand on the hypogastrium, without encountering any organ or tumour. Accordingly, on pulling the tumour gently down to the vulva, a curved needle was easily thrust through the vagina above the fundus of the uterus, and being provided with a double ligature, this was drawn through and tied on each side. After fifteen days, and repeated tightening of the ligature during that period, the mass thus isolated became gangrenous, and was removed with the knife on account of the excoriation caused by the acrid discharge. It was distinctly ascertained that the whole uterus had been removed. The patient did well, and the wound soon healed up.

In all of these cases the operation was performed on account of the exhaustion produced by a constant muco-sanguinolent

* Essay on Invertio Uteri, 1818.

† *Medico-Chirurgical Transactions*, x.

‡ *Dublin Hospital Reports*, iii.

§ *Archives Générales de Méd.* x.

discharge, which no ordinary means could arrest, and which threatened the speedy extinction of life. In all, the tightening of the ligature, especially at first, was attended with pain in the pelvis, or also in the abdomen, back, and thighs, and likewise with sickness, vomiting, and some general fever. These symptoms frequently approached so nearly the characters of peritonæal inflammation, that it was considered necessary to relax the ligatures again and again. But, nevertheless, in every instance the threatening symptoms were but temporary, and all the patients eventually recovered. It is, therefore, highly probable, that in bad cases of inversion or prolapsus uteri, where reduction is impossible and life in danger from the excessive discharge, the removal of the whole or a part of the uterus by ligature is not a very dangerous operation, and may be practised with the strong chance of a permanent and speedy cure.

The operation of excision of the uterus from its natural situation, however, although in many respects not materially different from that we have hitherto been considering, appears to be far more hazardous and of much more doubtful value. The following is a detailed abstract of the principal cases which have come under our notice.

I. The first we shall mention is one of *Dr Blundell's*, who has been particularly active in this department of operative surgery, having removed the scirrhus uterus no less than four times. A female 50 years of age had suffered for some time under carcinoma of the uterus, which affected also the vagina, and had advanced to the stage of ulceration. The uterus was of the size of a goose's egg; but so far as could be judged, the other organs of the pelvis, as well as the lymphatic glands of the groin, were not diseased. She had long laboured under profuse bloody discharge, by which her strength was much exhausted, but nevertheless she appeared to have vigour enough remaining to justify the hope that she could stand a formidable operation. The operation of excision was therefore resolved on, and performed in the following manner.

Dr Blundell divides it into four stages. *First*, An incision was made through the posterior surface of the vagina. This was done by applying the first and second fingers of the left hand at the point of junction between the healthy and diseased parts of the vagina, and placing under the protection of the point of the fore-finger, a long-handled scalpel, the extremity of the plane of which made an angle of 15 or 20 degrees with the axis of the handle. In this manner the point was cautiously urged through the vaginal membrane, without wounding the fore part of the rectum,—care being taken to withdraw the cutting edge occasionally within the shelter of the finger,

and to examine the wound with the nail. *Second.* The incision now made was extended right and left to the root of each broad ligament. For this purpose the opening was first enlarged by dilating and tearing it with the fore-finger; and then, the point of the knife being withdrawn within the finger, and its edge protruded slightly beyond the side of the finger, the incision was first extended towards the left. The extension towards the right was also effected by substituting for the knife hitherto used another of similar construction, but with the cutting edge on its opposite side. The whole posterior surface of the vagina was now divided, and the tips of the fingers were in contact with the intestines. *Third.* The uterus was next retroverted and pulled with the fundus foremost into the vagina. This was accomplished by thrusting the whole hand into the vagina, and the fingers through the incision in its posterior surface along the back of the uterus,—introducing a long-handled double hook under the protection of the fingers into the same situation,—pressing the hooks with the fingers into the uterus,—drawing the uterus gradually downward and backward, while the fingers were passed onward over the fundus,—and finally retroverting the uterus till it lay in the palm of the hand, by this time again in the vagina. The diseased organ could then be seen at the vulva. *Fourth.* It now only remained to divide the broad ligaments and Fallopian tubes, the peritonæal connexion of the uterus with the bladder,—the fore-part of the vagina—and the connecting cellular tissue between the uterus and bladder. In these steps, care was taken to divide the broad ligaments close to the uterus, and to keep clear of the neck of the bladder and ureters while dividing the vaginal membrane.

The operation was thus concluded in about an hour without the loss of more than four or five ounces of blood, and it was not necessary to secure any bleeding vessel. The pain caused was inconsiderable, except when the uterus was retroverted, and the ligaments stretched by pulling it downwards.

The woman's recovery was easy; but the particulars have not been made public. Five months after the operation she was fat and well, and the head of the vagina was closed up by the bladder. Her sexual desire continued strong. About a year after the operation she became a patient of *Dr Bright* in Guy's Hospital, for obstinate constipation of some weeks standing. No stricture could be discovered in the gut, and injections could be thrown up. But nevertheless the constipation increased, was complete for five days before her death, and was accompanied with much distension, but not with any pain of the belly. She expired with all the symptoms of obstructed intestine.

On dissection it was found that, about four inches from the anus, the rectum was considerably contracted, and at one point so much as to prevent the passage of a large pair of scissors. Its course was also unnaturally tortuous. The colon and lower part of the small intestines were much distended, and peritonæal redness and effusion were found on their surface. The vacuity formed by the removal of the uterus appeared to be covered over by the bladder, the ovaries, and the divided ends of the broad ligaments. In various parts of the pelvis cerebriform and carcinomatous tumours were found. Thus small scirrhus tubercles lay under the peritonæum near the site of the uterus, some of them under the peritonæal coat of the bladder; cerebriform tubercles were formed beneath the mucous membrane of the rectum where the stricture was; both ovaries were considerably altered by fungoid degeneration; the fat of the pelvis was firm, and here and there interspersed with small scirrhus tubercles, and a mass having the characters of true scirrhus extended upwards as far as the iliac vessels; the vagina, though for the most part healthy, presented at its upper extremity an ulcerated surface, connected with a soft cerebriform mass of the size of a walnut, and projecting upwards into the gape formed by the removal of the uterus.—[*Lond. Med. Gazette*, ii. 294, and iii. 797.]

II. The next case we shall mention occurred at Liverpool in September 1828, the operator being *Mr Banner*, surgeon of the North Dispensary there. The subject of this case, a female 44 years of age, was first seen by her surgeon sixteen months before the operation was performed; and at that time there was thickening, hardness, and irregularity of the neck of the uterus, for which it was proposed to perform amputation of that part only of the organ. To this proposal, however, the patient would not consent. By and bye a bloody sanious discharge took place from the vagina, her strength became much exhausted, and in September 1828, *Mr Banner* found the scirrhus state of the uterus had extended farther on the body of the organ than he could reach, and that the *os tincæ* was ulcerated. Extirpation was therefore proposed on the ground of *Dr Blundell's* success in the former case, and she resolved to take the chance of it.

Mr Banner followed a different plan from that pursued by *Dr Blundell*. He fixed a hook in the fore-part of the neck of the uterus, pulled the uterus down into the vagina, and secured it near the external opening of the vagina by passing a ligature through it, which was entrusted to an assistant. The vagina and peritonæum were then divided, first before and then behind, with a common scalpel upon the lower part of the neck

of the uterus. Next the fore and middle fingers of the left hand were passed, one through the posterior the other through the anterior incision, with the right broad ligament between them; which was then partially divided close to the uterus. An attempt was made to check the hemorrhage which ensued by securing the bleeding vessel of the ligament; but it was unsuccessful and proved unnecessary. The operator here abandoned his intended method as tedious and difficult; and adopted a modification of *Dr Blundell's* mode of turning out the uterus. It was accomplished with the fingers and hook as in the former case, introduced, however, at the anterior opening. The uterus being turned forward, the broad ligaments and Fallopian tubes were seen and easily isolated with the finger; upon which they were divided close to the uterus. The operation was finished in twenty-five minutes, and might have occupied a much shorter time, had it not been for the unnecessary attempt to secure the divided vessel of the right broad ligament. About six ounces of blood were lost. The intestines did not protrude or otherwise interfere with any part of the operation.

Soon after the operation two clots of blood, each amounting to eight ounces, were discharged; but this was the whole amount of the hemorrhage. She had also several attacks of fainting, with pain in the belly and constant vomiting, which were relieved from time to time for a few hours by opium. She passed a restless night, with some tension of the belly from retention of urine; but was relieved after the use of the catheter, and on the evening of the second day appears to have rallied considerably. On the morning of the third day the belly was tender on pressure, and became more and more so towards evening, so that first leeches, and then venesection were resorted to. The most distressing complaint, however, was vomiting, which never failed to recur every now and then, and produced much exhaustion. The pain, tension, and vomiting continued with varieties in severity, and not materially affected by the repetition of leeches and blood-letting, till early on the morning of the fifth day, when she sunk.

The uterus was affected with true scirrhus over the whole cervix, and a part of the body. The omentum and intestines, particularly the turns lying in the pelvis near the aperture, were much inflamed. Nothing particular was found in the condition of the remaining organs of generation, except that the left Fallopian tube was distended into a close sac of the size of a hen's egg, and filled with serum. No injury had been inflicted on the bladder, rectum, or any other organ. An attempt was made to discover the source of the hemorrhage. No

divided artery could be found, probably because they had retracted; but the open mouths of some divided veins were observed, which were traced to the pelvic plexus of veins, and which, as they possess no valves, *Mr Banner* thinks might have supplied the blood lost immediately after the operation.—[*London Medical Gazette*, ii. 582.]

III. IV. and V. The next are three unsuccessful cases related in very brief terms by *Dr Blundell*. In *Case III.* the usual symptoms of carcinoma of the uterus were well-marked, the disease had affected the vagina, and it was so far advanced, that death appeared likely to ensue within two months more. The particulars of the operation are not given. Six or eight ounces of blood only were lost. The pulse was extremely rapid, the skin clammy, and the debility extreme from the moment of the operation; the patient never rallied, and sunk in thirty-nine hours. On dissection it was found that the disease had been thoroughly extirpated, and that no mischief had been done to any organ in the neighbourhood. In *Case IV.* considerable hemorrhage took place after the division of the broad ligaments; and at the time the uterus was pulled down the pulse became imperceptible. The strength was partially restored for a time by means of opium; but the patient never rallied properly, and died in nine hours. On dissection the organs adjoining the uterus were found uninjured; there was no appearance of hemorrhage to any material extent; but the vessels of the broad ligament, and particularly the veins, were enlarged. Of the fifth Case, we are merely told that it proved fatal a few hours after the operation.—[*London Medical Gazette*, ii. 733 and 780.]

VI. The next case we shall mention has lately made much noise in France, where it happened in July 1829. The operator was *M. Récamier*, physician to the Hotel-Dieu of Paris; and he was completely successful. On this account we shall describe the particulars with some minuteness. The patient was fifty years of age, and had been affected for seven months with slight pains in the lower part of the pelvis, an uneasy lassitude in the loins when she stood, and a fetid, sanious, occasionally sanguinolent discharge from the vagina. The posterior lip of the mouth of the uterus had ulcerated away; the anterior lip was thick, prominent, and ulcerated; and an inch of the upper and back part of the vagina was similarly diseased. The mouth of the uterus admitted the finger into its cavity; the parietes were thickened from the formation of fungous excrescences; but no adhesion could be discovered between the uterus and rectum.

The operation was begun by pulling down the uterus to the

external aperture, by means of a pair of forceps (*pincers de museux*) fastened as high on the *cervix* as possible; and the forceps was retained in this position by an assistant. Having ascertained that the rectum had not descended with the uterus, *M. Récamier* passed the left fore-finger, between the fore part of the vagina and the tumour formed by the prolapsed uterus, to the *cul-de-sac* of the vaginal membrane, then slipped along this finger a bistoury, with a round hatchet-shaped point, and having a cutting edge only at its extremity, and made an incision in the *cul-de-sac* an inch in length,—care being taken to keep the cutting edge always towards the uterus, to avoid wounding the bladder. The bistoury was next withdrawn, and the finger thrust through the incision to separate the cellular connexions of the fundus of the bladder with the vagina and neck of the uterus. By moving the finger from right to left, and from above downwards, it arrived at length at the fold of the peritonæum, which passes from the bladder to the uterus. This was divided with the bistoury formerly used, and the incision extended right and left with a blunt-pointed bistoury.

The fore-finger now reached the fore surface of the uterus and broad ligaments, which were felt to be in a stretched state by the dragging of the uterus downwards. The edge of each broad ligament was now divided close to the uterus, till only a third of its thickness remained uncut. The bistoury being then withdrawn, a ligature was passed, by means of a curved needle, round the lower edge of the undivided part of each ligament, then over and round it with the help of the left fore-finger, and was finally secured by means of a *serre-nœud*, or knot-tie. At this stage hardly an ounce of blood was lost, and no farther hemorrhage was apprehended.

The fore-finger was next passed over the uterus, and brought its posterior surface forward and fundus downward through the incision in the vagina. In this situation the bistoury was again passed along the finger, to divide the peritonæum where it passes from the uterus to the rectum, to dissect the cellular connexion between these two organs, to divide the posterior surface of the vagina, and to complete the division of the broad ligaments. After this the uterus had no longer any attachment to the pelvis, and was easily withdrawn. During the separation of the uterus from the rectum, an assistant kept the finger in the gut, and gave notice of the operator's progress.

The portion of vagina removed was two inches and a quarter long behind, and hardly two inches long before; its surfaces of connexion with the bladder and rectum were quite healthy; and its inner membrane was much ulcerated on its posterior surface, though less so anteriorly. The ulceration which had

destroyed the posterior lip of the *os tincae* extended three or four lines beyond the neck upon the body of the uterus; but the uterus was otherwise healthy. At its junction with the vagina there was a large, hard, lobulated tumour, which extended backwards; and this, during the examination by the rectum, had been mistaken for the uterus itself.

At the moment of the removal of the diseased parts, the extremity of the omentum appeared between the nymphæ, and was immediately replaced. The vulva being washed with cold water, a bit of sponge was thrust into the orifice of the vagina, and the patient put to bed with the head and knees elevated, and a large poultice on the abdomen. In the course of the day she had several attacks of vomiting, and at night violent strangury, for which the catheter was used twenty times. A sero-sanguinolent discharge flowed from the parts.

Next day there was at first no change, except some fever, on account of which six ounces of buffy blood were drawn; and in the evening she was considerably easier. On the third day the lower part of the belly was a little distended, and she had slight spasmodic pain, but scarcely any tenderness. In the evening the venesection was repeated. On the fourth the venesection was repeated a third time, and a clyster given with effect. There was more swelling of the belly and occasional nausea, but no tenderness till the evening, when fixed pain was complained of in the right flank. This was removed at once by forty leeches.—On the fifth the ligatures were relaxed. Pain being complained of in the groins, leeches were applied again, and the tepid bath used occasionally.—On the sixth leeches were twice re-applied near the groins. The discharge had become brown and fetid; and the patient for the first time voided urine naturally.—On the seventh there was a marked amendment in her general state.—On the eighth examination with the speculum showed that cicatrization had begun at the end of the vagina. The ligatures were withdrawn.—After this her convalescence went on steadily. The discharge, at first very fetid, was gradually deprived of this quality by frequent injections of cold water, and at length became healthy pus. On the sixteenth day she was able to sit up a little, and in a month more she was able to walk in the garden of the hospital. At this time the upper part of the vagina was drawn together like a purse, and the opening which still remained admitted the point of the finger into a little cavity formed by the fundus of the bladder, and fore part of the rectum. This cavity discharged only a few drops of healthy pus, and nowhere in its vicinity could any hardness or swelling be per-

ceived. Here the account of the case by *M. Récamier* terminates.

Since then some notice has been taken of the woman's state by a French weekly periodical. About six months after the operation she became a patient at the Hotel-Dieu on account of costiveness and some collateral ailments. It was then learned, that she had continued ever after the operation to be annoyed with frequent desire to pass water, to which she was commonly obliged to yield once every hour; that a tendency to constipation which annoyed her before the operation continued after it; and that the inconvenience to which she was thus subjected prevented her from following her former occupation of tambouring. The bottom of the vagina was completely closed at the depth of two inches and a half; and the membrane was moistened by natural mucus only. The indisposition which led her to return to the hospital did not detain her there above a few days. [*Archives Gén. de Méd.* xxi. 78. *Nouvelle Bibliothèque Méd.* 1829, iii. 253, and *La Lancette Française*, Janvier.]

VII. The only other surgeon who in recent times has coveted the reputation of an operator in this line is *M. Roux* of Paris. He has very lately performed the operation twice. The former of his cases occurred in the person of a lady fifty-five years of age, who had been liable to leucorrhœa from her twenty-second till her thirty-eighth year, and who was again attacked in her fiftieth year, soon after the cessation of the menses, with a discharge, which at first appeared to be of the nature of leucorrhœa, but which ere long assumed the characters of the carcinomatous fluid. When examined immediately before the operation, the vagina was found quite healthy and the neck of the uterus swelled, but not hard; a hard fungoid tumour was attached to the mouth of the uterus; and the body of the uterus was felt through the rectum to be irregular and lobulated on its surface, but not enlarged. The patient had no fever, but exhausting pain.

The steps of the operation were for the most part the same as those followed by *M. Récamier*. On arriving at the expansion of the peritonæum from the bladder to the uterus, it was found, as had been anticipated from a previous examination, that the peritonæal covering of the two organs adhered firmly together. In separating them a tumour was discovered about the size of a walnut, which might have been mistaken for the uterus, as this lay behind it, and felt like the extremity of the rectum. The adhesions were destroyed with the fore-finger and the tumour extracted. On next attempting to turn the uterus downwards and forwards as *M. Récamier* did, *M. Roux* found it impossible at first to accomplish his purpose on account of the

narrowness of the vagina; and in his efforts a jet of urine was expelled. He consequently determined on dividing the anterior portion of the perinæum, by means of which sufficient room was obtained, and the operation was concluded in half an hour.

For half an hour afterwards the pulse was almost imperceptible and very rapid. After this re-action commenced. In nine hours some pain was complained of in the lower part of the belly, which, however, was not tense. Six leeches were therefore applied, and with relief. But the patient never rallied properly; the pulse remained feeble, her general uneasiness and exhaustion increased, and without any other particular symptom she died thirty-three hours after the operation.

The tumour at the mouth of the uterus was evidently cancerous, the womb itself friable, lardy, soft, somewhat transparent, and four inches long by three at its greatest diameter. Its cavity might have contained a small hen's egg, and was botryoidal. The left ovary presented the appearance of incipient cerebriform degeneration. The right broad ligament and ovary were completely cancerous, and the Fallopian tube distended with cerebriform matter. The bladder presented a circular opening three or four lines in diameter at the summit of the tumour which lay between the uterus and bladder. This opening could not have been made by an incision, otherwise it would have been linear. It must have arisen from the tumour having thinned the parietes of the bladder by its pressure, so that they gave way during the subsequent pressure of the uterus during the attempt to extract it. There was no appearance of inflammation in any part of the cavity of the belly. Only two ounces of a reddish serum were seen in the pelvis.

VIII. *M. Roux's* second case was that of a female thirty-eight years of age who had suffered from uterine pains for four years, and had a reddish discharge from the vagina for six months. The surface of the neck of the uterus was irregular, knotty, very hard, and cracked. The body of the womb was also felt by several physicians who examined her to be considerably enlarged. The same plan of operating was pursued as in the former instance; but, as on that occasion, several difficulties were again encountered. After opening the peritonæum, *M. Roux* experienced some difficulty in reaching the upper edges of the broad ligaments for the purpose of dividing and tying them; and only succeeded after pulling the uterus a little down by a strong pair of double forceps. The enlargement of the uterus rendered the turning of it forwards a very tedious and troublesome part of the operation, which at length was accomplished with a sudden jerk; and at the same moment the operator was covered with blood. The division of

the ligaments was then completed, and an attempt made to tighten the ligatures; during which, however, one of them gave way, and no attempt was made to replace it. The whole operation lasted twenty-nine minutes. The patient was pale, and the pulse contracted; but there was not any material hemorrhage. Cold cloths were applied to the vulva and abdomen. The patient never rallied. Her exhaustion went on increasing from hour to hour, though the hemorrhage was insignificant, and she died exactly a day after being operated on.

The neck of the uterus was affected as already mentioned. The body was four inches long by two and a half wide, uniformly hypertrophied, altered in colour, and marked by streaks of disorganization passing up from the diseased part of the cervix. The pelvis contained a little blood. Nowhere was there any appearance of inflammation. The bladder and rectum were entire and uninjured. [*Bulletins des Sciences Médicales*, October 1829.]

IX. *M. Récamier*, looking more to his former success than to the miserable result of his countryman's cases, has still more recently attempted the operation a second time; but on this occasion he has been more unlucky than any other operator. The patient was a lady, thirty-five years of age, who had been affected for some time with uterine pains, and who, on examination by the vagina, was found to have scirrhus uterus with deep ulceration of the *os tinæ*, and some extension of the disease both upwards on the body of the womb and downwards over part of the vagina. It was agreed by several surgeons of eminence, that no chance remained of saving her life except by an operation, to which she therefore gave her consent.

M. Récamier followed the same course as on the former occasion, when he was so eminently successful. But, unfortunately, in dividing the right broad ligament after the uterus was turned with the fundus downwards and forwards, the instrument was applied too near the ligature, which was consequently cut loose. The hemorrhage was arrested for the time by pressure; but it returned in the course of the day, continued to recur from time to time notwithstanding various attempts made to check it by plugging, and proved fatal the day after the operation. In this instance, besides the omentum, several folds of the intestines presented themselves at the gape. A material difference in the present operation too was that the section of the broad ligament was made a little beyond the ovary and Fallopian tube, which were consequently removed with the uterus.

We have now given a faithful analysis of the particulars, so far as they have been made public, of nine cases of this formidable operation. The number is sufficiently great to justify

some general conclusions as to the probability of its acquiring a respectable station among the objects of operative surgery.

The first point to be considered is the nature of its immediate dangers. The most direct and obvious of these is hemorrhage. There has been a singular variety in the cases as to the amount and danger of the hemorrhage. Among the five British cases in two only was there any material hemorrhage, and nevertheless no precautions were taken during the operation to prevent it. It is plain, however, from the circumstances of these two cases, and of case ninth, the second of *M. Récamier's*, that on the whole mortal hemorrhage, or a degree of it which must be extremely hazardous in the exhausted state to which the patient will always be reduced before any surgeon would dream of operating, is a likely enough occurrence, and ought therefore to be guarded against. The method adopted by *M. Récamier* appears as simple a mode of obviating the danger as can be devised. But a much more serious and immediate danger depends on collapse from the violent nervous impression produced by the operation. It appears somewhat questionable whether this was not fully more the cause of death than the hemorrhage, even where hemorrhage did occur, for the blood lost does not seem to have been in any instance very great; and at all events simple collapse was the cause of death in the greater number of the cases.

Two patients only of the nine recovered. If the surgeon could rely even on that proportion of genuine recoveries, the chance might perhaps be sufficient to justify the general adoption of the operation. But unfortunately there is no satisfactory evidence that either of the cases was an instance of genuine ultimate recovery. So far as may be judged from the small number of cases of this denomination three remote risks must be encountered. In the first place, it seems impossible to have any certainty or rational probability of the disease being confined to parts which can be extirpated. *M. Récamier* and others who are favourable to the operation dwell strongly on the necessity of ascertaining that the uterus is quite moveable; and the French operator in particular cautions those who would imitate him to trust rather to the sensation communicated to the finger in the rectum than to that produced in an examination by the vagina. But may the disease not have extended to adjoining organs, although the uterus remains moveable? And is it always possible to ascertain whether this has happened or not? It may reasonably be suspected that no examination which it is practicable to make will secure the surgeon against this danger. And we confess it is difficult to suppress a smile when we read of the operator pretending to ascertain by fingering the

rectum and vagina, that the broad ligaments are free of disease. The reader will perceive the force of these observations by turning to case seventh, one of the unsuccessful attempts of *M. Roux*.—The second remote risk is the probability of the scirrhus disorder appearing in the neighbourhood of the extirpated organ, even when every portion of disease has been removed at the time of the operation. It is not improbable that this occurred in the first case of *Dr Blundell*; although at the same time doubts may be entertained whether some part of the disorder found after death did not exist at the date of the removal of the uterus. The chance of the recurrence of scirrhus cannot be calculated. But it is undoubtedly a circumstance to be taken into account in considering the real value of the operation. Lastly, both the successful case of *Dr Blundell* and that of *M. Récamier* show, that another remote risk is obstruction of the rectum from changes induced in the relative position of the parts in the pelvis by the removal of so material a part of its contents, or by disease brought on in some other manner. This plainly happened in the former of the two; and farther experience will be required before *M. Récamier* can safely pronounce that his patient is exempt from some such event.

No one can be surprised, therefore, that in late years *Dr Blundell* in Britain, and *M. Récamier* in France, have hitherto met with few imitators; and more particularly that, with the exception of *M. Roux*, no imitator has been found among the many surgeons who have previously established for themselves a reputation for skill and daring in these two countries.

A great difference obviously exists between the danger attending the operation of excision of the uterus from its natural situation, and the removal by ligature of its fundus, or even of the entire organ in cases of reversion or prolapsus. The latter operation, indeed, does not seem to be attended with any material risk, so far as the cases hitherto published will justify an opinion.

It is no part of our object in the present analysis to consider the merits of the several modes of operating which have been tried by different surgeons. We have put the reader, however, in possession of the means of judging for himself. But we cannot help taking notice of an extraordinary proposal which has been made for improving the operation by a foreign contemporary, the editor of the *Bulletins des Sciences Médicales*. This gentleman, who, it is fair to add, seems to hold the operation very cheap, suggests, that, if it is to be practised, a better method would probably be to extract the uterus through the hypogastrium instead of the vagina, as he thinks that the parts will be more easily reached and subjected to much less dragging. We really, for our own parts, do not see how this mode of operating will give the surgeon any superior facilities, or how

any advantage is to be derived from making two great openings into the pelvis instead of one.

In the present sketch no notice has been taken of the operation of excision of the neck of the uterus,—an operation which belongs to the same class with those we have already described, and which was proposed some years ago, and continues still to be very frequently practised by *M. Lisfranc* of Paris. The purpose is to remove scirrhus of the uterus in its incipient stage when it is confined to the cervix. The instances in which he has performed it have been extremely numerous, and his success is said to have been most encouraging. It is singular, however, that his success has not hitherto encouraged many of his countrymen, or, so far as we know, any British surgeon to follow his example. We shall probably take an early opportunity of recurring to this subject; meanwhile, we may observe, a general feeling of distrust prevails among operating surgeons in this country of the reality of *M. Lisfranc's* success. It is conceived that the existence of scirrhus is rarely suspected when it affects only so much of the uterus as may be removed by his operation,—that when suspected to exist, its true nature is not always easily determined at so early a stage,—in short, that *M. Lisfranc* must often operate on cases which in Britain would not receive the name of cancerous induration.

ART. IV.—1. *A Catalogue of the Preparations in the Anatomical Museum of Guy's Hospital. Arranged and Edited by desire of the Treasurer of the Hospital, and of the Teachers of the Medical and Surgical School.* By THOMAS HODGKIN, M. D., Licentiate of the Royal College of Physicians of London, Demonstrator of Morbid Anatomy, and Curator of the Museum at Guy's Hospital, &c. &c. 1829. 8vo. Pp. not marked, but contains 31 sheets.

2. *Descriptive Catalogue of the Anatomical Museum of the University of Edinburgh.* 8vo. Edin. 1829. Pp. 245.

NEXT to the collection of objects illustrating the healthy structure and morbid changes of the animal body, a descriptive catalogue is not only of the utmost importance but very nearly indispensable. The mere principle of arrangement, however rude and simple it may be, suggests the necessity of some enumerative list; and if it is difficult to arrange, it is impossible to convert to much use any collection, however valuable and extensive, without such an accompaniment. The facts demonstrated by such collections can thus only be made generally